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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,912	02/09/2001	Peter Lin	979642-600-001	9053

7590 09/13/2006

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Washington, DC 20001-2113

EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/781,912	Applicant(s) LIN ET AL.	
	Examiner Kristie Shingles	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

RESPONSE TO AMENDMENTS

No claims have been amended.

Claims 1-20 are pending.

RESPONSE TO ARGUMENTS

1. Applicant's arguments filed 7/6/2006 have been fully considered but they are not persuasive.

- A. Applicant argues that one of ordinary skill in the art “would not have been motivated to combine” the prior art of record *Boyle et al* (6,665,711) and *Dutnall* (6,584,098) because *Boyle et al* “is directed to a method of communicating with a wireless (e.g., mobile) device that utilizes both a narrowband channel and a wideband channel; while *Dutnall* is directed to “a system for carrying packetized voice and other traffic that cannot tolerate delays over a circuit-switched connection when such a connection is available”.

A.1. Examiner respectfully disagrees. In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071,

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5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, *Boyle et al* with *Dutnall* are teach the priority treatment of an actual session between a wireless device and a remote network by allocating the appropriate resources necessary to enable the session. *Boyle et al* disclose the establishment of two-way communication between a wireless mobile communication device and a remote computer network via an intermediary computer system (Abstract); while *Dutnall* discloses a telecommunications system comprising an intermediary computer system that provides connectionless support for data transmission by allocating resources and using the RSVP protocol to provide priority treatment of the established call/session (col.3 lines 33-37, col.9 lines 12-67, col.11 lines 32-64, col.12 lines 25-27 and 44-48, col.13 lines 35-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Boyle et al* with *Dutnall* for the purpose of implementing a means to determine the type of treatment a session should receive when allocating resources for a requested session, because a particular communication/transport protocol has to be determined in order to effectively transmitting the data on the network to provide the appropriate quality of service to the clients of the network. Doing so allows for the specialized handling and processing of particular types of communication sessions, which depends upon the content-type or protocol-type being exercised in the transmitted packets and determines if any type of priority treatment should be given to the session.

- B. Applicant argues that the “hypothetical modification” is not understood and is “unnecessary” since *Boyle et al*’s system already allocates resources based on content.**

B.1. Examiner respectfully disagrees. In response to Applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). *Boyle et al* and *Dutnall* both teach allocating resources in communicative sessions between wireless/mobile devices and the network message type—*Boyle et al*'s teaching of allocating resources based on content is modified by *Dutnall*'s teaching of allocating resources based on protocol/message-type—wherein a particular treatment is extended to packetized voice and RSVP protocol messages (col.9 line 49-col.10 line 5, col.10 lines 60-64, col.11 lines 32-40). This modification is not “unnecessary” but is useful for extending the capabilities of *Boyle et al*'s system to prioritize treatment and allocate resources to packets of a particular protocol. Applicant's arguments are therefore unpersuasive, and the rejection under *Boyle et al* and *Dutnall* is maintained.

CLAIM REJECTIONS - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-13, 15, 16 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Boyle et al* (USPN 6,665,711) in view of *Dutnall* (USPN 6,584,098).

a. **Per claim 8**, *Boyle et al* teach a method for providing two-way communication of content between a wireless mobile communication device and a remote computer network via an intermediary computer system, comprising the steps of:

- originating a request for data at said wireless mobile communication device and transmitting said data request through a network and layer framework to a two-way wireless messaging network (col.2 lines 53-58; wireless mobile device originates a request and sends it to the wireless network of the link station through the link infrastructure);
- transmitting said request for data from said two-way wireless messaging network via a first electronic queue to said intermediary computer system in communication with said remote computer network (col.2 lines 53-58; the request is forwarded from the link infrastructure to the server);
- retrieving the requested data from said remote computer network (col.2 lines 55-58, col.9 lines 27-31, and col.6 lines 62-67; server retrieves requested data from web servers of remote computer networks);
- placing said retrieved data in a second queue (col.2 lines 55-58; server holds or stores the retrieved data for transmittal to wireless mobile device—a queue can be implied);
- transmitting said retrieved data from said second queue to said wireless communication device via said two-way wireless messaging network (col.2 lines 55-62; server forwards retrieved data to the mobile device via the link infrastructure and wireless network); and
- displaying said retrieved data at said wireless communication device (col.6 lines 47-49 and col.9 lines 31-37; mobile device has a display screen for displaying data, nonetheless it is intuitive that once the mobile device has received the retrieved data that it will consequently be displayed on the device).

Yet *Boyle et al* fail to explicitly teach effecting priority treatment of an actual session between said wireless communication device and said remote computer network by

allocating dedicated resources of said intermediary computer system to enable said actual session connection to mimic a circuit communication. However, *Dutnall* discloses a telecommunications system comprising an intermediary computer system that provides connectionless support for data transmission by allocating resources and uses the RSVP protocol to provide priority treatment of the established call/session (col.3 lines 33-37, col.9 lines 12-67, col.11 lines 32-64, col.12 lines 25-27 and 44-48, col.13 lines 35-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Boyle et al* with *Dutnall* for the purpose of implementing a means to determine the type of treatment a session should receive when the allocating resources for a requested session, because a particular protocol has to be determined for effectively transmitting the data on the network in order to provide the appropriate quality of service to the clients of the network.

b. **Per claim 1**, *Boyle et al* teach a system for providing two-way communication of content between a wireless mobile communication device and a remote computer network, comprising:

- a wireless two-way messaging network further comprising: said wireless communication device (col.2 lines 53-58, col.5 lines 14-17);
- a base station in communication with said wireless communication device (Figure 1, col.5 lines 50-63; a base station is an inherent fundamental component critical to the functionality of wireless mobile communication devices);
- a gateway server in communication with said base station (Figure 1, col.5 lines 42-50);
- a network and layer framework for translating said communicated content between said wireless communication device and said base station (col.5 lines 44-50); and

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- an intermediary computer system in communication with said wireless two-way messaging network and said remote computer network (Figure 1, col.5 line 64-col.6 line 56).

Although, *Boyle et al* teach establishing a communication session between the mobile device and the proxy server (col.6 lines 14-56); *Boyle et al* fail to explicitly teach said intermediary computer system further comprising: means for effecting priority treatment of an actual session connection between said wireless mobile communication device and said remote computer network by allocating dedicated resources of said intermediary computer system to enable said actual session connection to mimic a circuit communication. However, *Dutnall* discloses a telecommunications system comprising an intermediary computer system that provides connectionless support for data transmission by allocating resources and uses the RSVP protocol to provide priority treatment of the established call/session (col.3 lines 33-37, col.9 lines 12-67, col.11 lines 32-64, col.12 lines 25-27 and 44-48, col.13 lines 35-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Boyle et al* with *Dutnall* for the purpose of implementing a means to determine the type of treatment a session should receive when the allocating resources for a requested session, because a particular protocol has to be determined for effectively transmitting the data on the network in order to provide the appropriate quality of service to the clients of the network.

c. **Per claim 9**, *Boyle et al* and *Dutnall* teach the method of claim 8, *Boyle et al* further teach wherein said request for data is a Uniform Resource Locator (col.5 lines 23-25, col.10 lines 4-19).

d. **Claim 3** is substantially equivalent to claim 9 and is therefore rejected under the same basis.

e. **Per claim 10**, *Boyle et al* and *Dutnall* teach the method of claim 8, *Boyle et al* further teach wherein said wireless communication device includes a stored Wireless IP (col.7 lines 39-43 and col.8 lines 36-44; *Dutnall*: col.7 line 65-col.8 line 3, col.8 lines 37-39), and further wherein the step of transmitting said data request through a network and layer framework to a two-way wireless messaging network comprises the steps of:

- encoding said data request into Message Transport Protocol (col.12 lines 44-67; data requests can be encoded into the determined/specific transport protocol comprising the Message Transport Protocol through use of PUSH PDU);
- sending said Message Transport Protocol-encoded data request to one of a short messaging system stack and an email stack (Fig.4, col.9 lines 38-51, col.10 lines 20-42 and col.12 lines 60-67; transport encoded data can be processed with the short message service and through the email system); and
- transmitting said Message Transport Protocol-encoded data request and said Wireless IP to said intermediary computer system (col.8 lines 47-49 and col.9 lines 1-8; device ID is held in the corresponding user account database maintained on the server).

f. **Per claim 11**, *Boyle et al* teach the method of claim 10, wherein the step of transmitting said data request through a network and layer framework to a two-way wireless messaging network further comprises the steps of:

- generating a copy of said Message Transport Protocol-encoded data request (col.12 lines 44-67);
- placing said copy of Message Transport Protocol-encoded data request in said wireless communication device (Figure 4, col.8 lines 47-49, col.9 lines 1-51, col.10 lines 20-42 and col.12 lines 60-67);

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- waiting a fixed duration for one of positive receipt confirmation and negative receipt confirmation from said intermediary computer system (col.16 lines 4-25; timeout period for positive and negative receipt confirmations);
- retrieving said copy of said Message Transport Protocol-encoded data request from said wireless communication device in response to said negative receipt confirmation (col.3 lines 5-20, col.13 lines 1-9, col.15 lines 36-58 and col.16 lines 13-25; in response to negative/unsuccessful receipt confirmation another redelivery is attempted);
- transmitting said retrieved copy of said Message Transport Protocol-encoded data request and said Wireless IP to said intermediary computer system (col.2 lines 55-62, col.9 lines 27-31, col.11 line 21-col.12 line 43, col.13 lines 1-9, col.14 lines 17-33; server forwards retrieved data to the mobile device via the link server infrastructure and wireless network);
- removing said copy of said Message Transport Protocol-encoded data request from said wireless communication device in response to said positive receipt confirmation from said intermediary computer system (col.11 lines 37-55 and col.15 lines 51-58; upon successful delivery/positive receipt, the data gets removed from the queue list).

g. **Claim 2** is substantially equivalent to claim 11 and is therefore rejected under the same basis.

h. **Per claim 12**, *Boyle et al* and *Dutnall* teach the method of claim 8, *Boyle et al* further teach wherein the step of retrieving the requested data from said remote computer network further comprises the steps of:

- retrieving said request for data in said first electronic queue (Abstract and col.9 lines 27-31; servers are used to retrieve data to fulfill requests);
- validating said retrieved request for data for Message Transport Protocol coding and transmission completeness (Figures 8A-8D; protocol encoding of data receipt acknowledgement);
- analyzing said retrieved request for data to identify type of data requested (Figure 8B; determines data type i.e. binary or textual—*Dutnall*: col.3 lines 33-47, col.4 lines 31-67, col.9 line 49-col.10 line 24; determines if data type is voice or data packet);

- locating a data module suitable for retrieval of said requested data (col.7 lines 5-17; obvious implied server characteristic—server uses specific data modules to perform designated function including retrieval—*Dutnall*: col.10 lines 27-59, col.11 lines 25-64, col.13 lines 22-28); and
- passing said data module to a content fetcher (col.7 lines 19-33; obvious server characteristic exhibited by fetching/retrieval functions).

i. **Claim 5** contains limitations that are substantially equivalent to claims 8 and 12 and is therefore rejected under the same basis.

j. **Per claim 13**, *Boyle et al* and *Dutnall* teach the method of claim 12, *Boyle et al* further teach the method further including the steps of: transforming said retrieved data to an intermediary markup language (col.5 lines 17-25; HTML serves as an intermediary markup language); and transforming said retrieved data to a target markup language (col.5 lines 64-col.6 lines 1-25 and col.7 lines 21-27; HDML serves as a target markup language).

k. **Per claim 15**, *Boyle et al* and *Dutnall* teach the method of claim 8, *Boyle et al* further teach wherein said second electronic queue divides said retrieved data into a plurality of data packets (Figure 8A-8C; retrieved data may be divided into fragments depending on the maximum message system limit—*Dutnall*: col.6 lines 50-60).

l. **Per claim 16**, *Boyle et al* teach the method of claim 15, further including the step of Message Transport Protocol-encoding each of said plurality of data packets (Fig.8C and col.3 lines 21-33; fragments are PUSH PDU-encoded—*Dutnall*: col.3 lines 23-49, col.12 lines 43-60).

m. **Claim 6** is substantially equivalent to claim 16 and is therefore rejected under the same basis.

n. **Per claim 20**, *Boyle et al* and *Dutnall* teach the method of claim 8, *Boyle et al* further teach the method further including the steps of: encrypting one of said data request and

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said retrieved data prior to transmission (col.16 lines 53-63; link station can provide encryption of messages between it and mobile devices); and decrypting said one of said data request and said retrieved data subsequent to transmission (by virtue of encryption process, intuitively, decryption is an obvious implication in order to provide usability of retrieved data).

o. **Claim 4** is substantially equivalent to claim 20 and is therefore rejected under the same basis.

p. **Claim 7** is substantially equivalent to claims 10, 12 and 20 and is therefore rejected under the same basis.

4. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over *Boyle et al* (USPN 6,665,711) and *Dutnall* (USPN 6,584,098) in view of *Slaughter et al* (USPN 6,643,650).

Per claim 14, *Boyle et al* teach the method of claim 13 as applied above and transforming said retrieved data to an intermediary markup language and transforming said retrieved data to a target markup language. However, *Boyle et al* fail to teach that the specific intermediary markup language is Extensible Markup Language (XML). Nevertheless, *Slaughter et al* disclose the use of XML for expressing retrieved data (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Boyle et al* and *Dutnall* with *Slaughter et al* to include the use of XML as a means for data representation for the purpose of extending the capability of the system to support additional standard text formatting languages.

5. **Claims 17-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Boyle et al* (USPN 6,665,711) and *Dutnall* (USPN 6,584,098) in view of *Meyer* (USPN 6,700,902).

a. **Per claim 17**, *Boyle et al* and *Dutnall* teach the method of claim 16 as applied above, further including the step of Message Transport Protocol-encoding each of said plurality of data packets. However, *Boyle et al* and *Dutnall* fail to teach wherein each of said plurality of data packets has a maximum length of 448 characters. Nevertheless, *Meyer* discloses a plurality of data packets that are dynamically sized such that their size is substantially close to and not greater than the maximum data packet size capable of being transferred, wherein the operational maximum length is determined by increasing or decreasing the stored data packet size until a successful transfer is determined (col.5 lines 20-col.6 lines 1-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Boyle et al* and *Dutnall* with *Meyer* to provide for an increase of the maximum length of transferable data packets for the purpose of improving the wireless data packet transmission efficiency.

b. **Per claim 18**, *Meyer* teaches the method of claim 17, wherein said step of transmitting said retrieved data from said second electronic queue to said wireless communication device via said two-way wireless messaging network is conducted using one of Short Messaging Service protocol, Simple Mail Transfer Protocol, and Simple Network Paging Protocol (col.7 lines 48-65 and col.9 lines 4-45; the use of a variety of communication protocols for transmitting retrieved data, which comprises but is not limited to SMS, SMTP and SNPP).

c. **Per claim 19**, *Meyer* teaches the method of claim 17 as applied above, yet *Meyer* fails to teach the method of claim 17, further including the step of retrieving a Wireless IP and

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session for said retrieved data. Nevertheless, *Boyle et al* disclose in the method of claim 8 from above and on the step of retrieving a Wireless IP and session for the retrieved data (col.2 lines 43-62 and col.7 lines 18-55; *Dutnall*: col.7 line 65-col.8 line 3, col.8 lines 37-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Boyle et al* and *Dutnall* with *Meyer* and in order to retrieve a Wireless IP and session for the retrieved data for the purpose of identifying the mobile device and its session for correlation with its corresponding requested/retrieved data. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

CONCLUSION

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: *Andersson et al* (US 6,434,380), *Patel* (US 6,907,243), *Mizutani et al* (US 6,798,757).

7. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

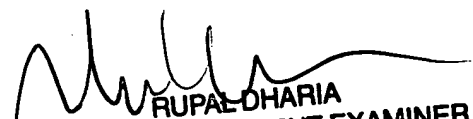
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER